METACOGNITIVE THINKING AND EMOTIONAL COMPETENCE AS DETERMINANTS OF RESILIENCE AMONG BELL'S PALSY SUBJECTS

SYNOPSIS

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Bell's palsy is a type of facial paralysis that results in an inability to control the facial muscles on the affected side. Bell's palsy is also known as facial paralysis. Facial palsy occurs from nervous input interruption at any of the facial nerve segments, commonly affecting the motor neurons of facial muscles receiving their neurological innervations from the seventh cranial nerve (the facial nerve) (VanSwearingen and Brach, 1996). Bell's palsy indicates symptoms includes drooping of the eyelid, drooping corner of the mouth, dryness of the eye or mouth, impairment of taste, excessive tearing in one eye, pain or discomfort around the jaw and behind the ear, ringing in one or both ears, headache, and loss of taste, impaired speech, difficulty in eating or drinking. Symptoms can vary from mild to severe. People suffering from diabetes mellitus, cancer, peptic ulcer disease, suppurative otitis media, herpes zoster, multiple sclerosis, sarcoidosis, high blood pressure, upper respiratory tract infection, brain tumors are deemed conditions that people may suffer from Bell's palsy. Most of the symptoms usually begin suddenly and reach their peak within 48 hours. According to Leventhal and Benyamini (1997) "the degree of facial nerve recovery depends on patient's age, lesion type, nerve nurturing, neuromuscular involvement and therapy installed." Facial nerve injury recovery may take weeks or up to four years. Facial palsy requires medical, physiotherapeutic, speech and hearing therapeutic approaches. The prognosis depends to a great extent on the time at which recovery begins. Recovery is less likely to be satisfactory with complete rather than incomplete paralysis, with pain behind the ear and in older people.

Bell's palsy is the most common cause of one sided facial nerve paralysis (70%). It occurs in 5 to 11 per 10,000 people per year. About 1.5% of people are affected at some point in their life. It most commonly occurs in people between ages 15 and 60. Males and females are affected equally. Bell's palsy is named for Sir Charles Bell, a 19th century Scottish surgeon who described the facial nerve and its connection to the

condition. Bell's palsy affects only one of the paired facial nerves and one side of the face, however, in rare cases, it can affect both sides. Symptoms of Bell's palsy can vary from person to person and range in severity from mild weakness to total paralysis. Hirschenfang and Goldberg (1999), Bell's palsy patients' suffers from many psychological problems like stress, depression, anxiety and depression. Indicators for poor prognosis include complete facial palsy, no recovery of symptoms by three weeks, age over 60 years, severe pain, herpes zoster virus, co morbid status e.g. hypertension, diabetes, pregnancy and severe degeneration of the facial nerve shown by electrophysiological testing.

Metacognitive Thinking

Metacognitive thinking refers to the higher order thinking that involves active control over the thinking process as well as it is a knowledge and awareness of one's own cognitive processes. The theory of metacognition attributed to Flavell with his work in 1979. Metacognition is a multidimensional set of skills which involve thinking about thinking. Rasmussen (1986) with the context of human machine system suggested that "Metacognition is an abstraction hierarchy in which higher level describes the functional process of system while lower level describes physical structure of system." Metacognition is a fundamental nature of human cognition because every human being do not have cognitive activities only but they have cognition itself about cognition.

Metacognition is a knowledge about our cognitive processes which guide individual in arranging circumstances and selecting strategies to enhance further cognitive performance. Metacognition is a important pillar which differentiate between animals and human cognition. Content of working memory enhances Metacognitive process and according to these contents individual reaches to judgment, related to his cognitive

situations. According to Akin (2007) “Metacognitive thinking is the highest level of mental activity since it keeps individuals aware of themselves and others during thinking to solve problems” The main work of Metacognitive thinking is observing and controlling mental functioning which directs to solve problems and decision formation. ‘Metacognitive thinking’, ‘metaknowledge’ or ‘thinking about thinking’ are the terms used for metacognition.

Flavell (1979) demonstrated that “metacognition also consists of cognitive regulation which deals with planning, monitoring and evaluation.” Planning is the identification, selection of strategies and utilization of resources, including goal setting, and activating backward knowledge. Monitoring is awareness of performance, self testing and cognitive experiences. Evaluation is appraising of cognitive process and outcome of planning, monitoring with revising goals. Many researchers observed relationship between cognitive knowledge and cognitive monitoring. Flavell (1981) states that metacognition contributes in monitoring and regulation of cognition and also plays crucial role in the development and refinement of metacognitive knowledge.

Emotional Competence

Emotional competence refers to one's ability to express or release one's inner feelings. It implies an ease around others and determines one's ability to effectively and successfully lead and express. The concept of emotional competence is rooted in understanding emotions as normal, useful aspects of being human as emotional competences is the individual differences in the identification, understanding, expression, regulation and use of one’s emotions and those of others in the social settings. Anger is a reaction to aggression and gives a person the strength to repel the aggression. Though anger is usually seen in a negative light, sometimes it can also serve the purpose of protection. Grief is a reaction to abandonment or feeling unloved and it has the effect of eliciting

sympathetic responses from others. Fear is a response to danger and has a clear physiological effect of heightening our senses and speeding up our reactions.

Some psychologists believe that if appropriate emotions are not expressed on a regular basis, a misplaced or unresolved memory of them becomes stored. Alternatively, this may also lead to an inability to process emotional clues in others, or have emotionally appropriate behaviors in oneself. Events in the future may trigger old emotions resulting in inappropriate emotional responses, or may trigger nothing, leaving one with a lack of emotional competence. According to Krayenoord and Schneider (1999), Emotional competence can lead to improved health through avoiding stress that would otherwise result from suppressing emotions. Emotional competence can also lead to improved relationships since inappropriate emotions are less likely to be expressed and appropriate behavior is not avoided through fear of triggering some emotion.

Resilience

Resilience is defined as an individual's ability to successfully adapt to life tasks in the face of social disadvantage or highly adverse conditions. Adversity and stress can come in the shape of family or relationship problems, health problems, or workplace and financial worries, among others. Resilience is one's ability to bounce back from a negative experience with "competent functioning". Resilience is not a rare ability; in reality, it is found in the average individual and it can be learned and developed by anyone. Resilience should be considered a process, rather than a trait to be had. It is a process of individuation through a structured system with gradual discovery of personal and unique abilities.

A common misapprehension is that resilient people are free from negative emotions or thoughts, remaining optimistic in most or all situations. To the contrary,

resilient individuals have, through time, developed proper coping techniques that allow them to effectively and relatively easily navigate around or through crises. In other words, people who demonstrate resilience are people with optimistic attitude and positive emotionality and are, by practice, able to effectively balance negative emotions with positive ones. Resilience is generally thought of as a "positive adaptation" after a stressful or adverse situation. It is important to note that resilience is not only about overcoming a deeply stressful situation, but also coming out of the said situation with "competent functioning". Resiliency allows a person to rebound from adversity as a strengthened and more resourceful person.

Richardson and his colleagues (1990) contended that resiliency is “the process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills than prior to the disruption that results from the event”. Similarly, Higgins (1994) described resiliency as the “process of self-righting or growth”, while Friborg and Hjemdal (2005), explained how resilience has come to describe a person having a good track record of positive adaptation in the face of stress or disruptive change.

The present proposed work is based on Fredrickson (2005), The broaden-and-build theory of positive emotions which takes a complementary position and holds that positive emotions broaden individuals’ thought and actions, enabling them to draw flexibly on higher-level connections and broadened cognition in turn creates behavioral flexibility that over time builds personal resources, such as mindfulness, resilience, social- emotional closeness, and even physical health. Thus, according to the theory, peasurable positive emotions can have a long-lasting impact on functional outcomes of an individual, leading to enhance well-being and social connectedness through emotional

competence and also positive emotions expands one's mindsets in ways that one can gradually reshape oneself.

AIM

To study the relationship and relative contribution of metacognitive thinking and emotional competence in determining resilience among Bell's palsy subjects.

OBJECTIVES

- To study the relationship of metacognitive thinking and resilience among Bell's palsy subjects.
- To study the relationship of emotional competence and resilience among Bell's palsy subjects.
- To study the relative contribution of metacognitive thinking and emotional competence in determination of resilience.

HYPOTHESES

Based on the previous studies and researches in the field of psychology we may infere the following hypothesis.

- Resilience will be positively related with metacognitive thinking and with emotional competence among Bell's palsy subjects.
- There is a significant relationship of metacognitive thinking with emotional competence among Bell's palsy subjects.
- Contribution of metacognitive thinking will be more as compared to emotional competence in determination of resilience.

OPERATIONAL DEFINITIONS

Bell's palsy: Bell's palsy is a type of facial paralysis that results in an inability to control the facial muscles which affects individual's life in the form of facial nerve malfunctioning and deformity (Sullivan, 2007).

Metacognitive Thinking: Metacognitive Thinking refers to the higher order thinking that involves active control of self over the thinking process. The basic notion of metacognitive thinking is the awareness of an individual self as a cognitive thinker. Metacognitive thinking is the consciousness of individual's known capability of knowing, remembering and forgetting about known cognitive thinking (Hendy, 1993).

Emotional Competence: Emotional competencies the individual difference in the identification, understanding, expression, regulation and use of one's emotions and those of others (Mikolajczak, 2015). Emotional competence refers to one's ability to express or release one's inner feelings (emotions). It implies an ease around others and determines one's ability to effectively and successfully lead and express.

Resilience: Resilience is defined as an individual's ability to successfully adapt to changes in life and the ability to easily cope with adverse conditions. Resilience the ability to become strong, healthy or successful again after something bad happens (Merriam, 1993).

JUSTIFICATION OF PROBLEM

Since the world is becoming more and more competitive day by day, quality and performance is the prime requisite for growth and success in life. In this fast moving world people started ignoring their health and trapped by various diseases. In present scenario bell's palsy is one of the emerging neurological illnesses that affect individual's personality, cognition, emotions and bring change in individual's life in the form of facial

nerve malfunctioning and deformity. It is very obvious that every individual have to face various situations where they have to present self, interact with others, share ideas, views and also work with social settings where facial malfunctioning and deformity hinders with individuals self esteem, self confidence, social and emotional competence to present self in social setting. Clinical investigation of various clinics in Delhi identified approximate 757 cases suffering from bell's pasly and therefore researcher will take 15 percentage of the population that is 113 as a sample of the study. Various studies found that there is a positive relationship between, metacognitive thinking, emotional competence and resilience among Bell's palsy patients. Therefore, researcher is curious to know whether there is a relationship between, metacognitive thinking, emotional competence and resilience among Bell's palsy patients.

METHOD

VARIABLES

Predictor Variables

- Metacognitive Thinking
- Emotional Competence

Criterion Variable

- Resilience

Control Variables

- Age
- Severity of Bell's palsy
- Duration of illness

Inclusion criteria:

- Both male and female subjects

- Age range of 20-45 years,
- Suffering from bell's palsy from last 1 year;
- Having severity more than 50% and above.

Exclusion criteria:

- Subjects below twenty and above forty five years of age.
- Suffering from Bell's palsy more than 1 year.
- Having severity less than 50%.

SAMPLE SELECTION

Out of total Bell's palsy cases identified in Delhi a random sample of 113 will be selected for the purpose of the sample within the age range of 20- 45 years, suffering from Bell's palsy since last 1 year with severity more than 50% and above.

TOOLS

1. **Facial Disability Index (FDI):** Facial Disability index is constructed by VanSwearingen and Brach (1996). FDI is designed to provide the clinician with information regarding severity of the facial nerve disability and related social and emotional wellbeing of patients. The reliability of FDI is 0.83 and validity is 0.79.

2. **Metacognitive Thinking Scale (MCTS):** Metacognitive Thinking Scale is constructed by Sandhu and Goel (2010). The split- half reliability of this scale is 0.87 and validity is 0.78. The scale consisted of 80 items. Higher scale value indicates better Metacognitive Thinking.

3. **Emotional Competence Scale (ECS):** Emotional competence scale is constructed by Bharadwag and Sharma in (1998). This scale consists of 30 items. The reliability of this scale is 0.81 and validity is 0.72.

4. **Resilience Scale:** Resilience scale will be constructed by researcher herself.

RESEARCH DESIGN

In the present research a correlation design will be made to study the relationship among metacognitive thinking, emotional competence and resilience among Bell's palsy subjects.

STATISTICAL ANALYSIS

Data will be analyzed by using the product moment correlation coefficient and Multiple Regression Analysis will be formed to estimate the relative contribution of each predictor variable (metacognitive thinking, and emotional competence) in the prediction of criterion variable (resilience) will be used.

Psychological Intervention will be given to that variable which will contribute significantly in determination of resilience among bell's palsy subjects.

OBJECTIVE

To study the effectiveness of psychological interventions in enhancing metacognitive thinking and emotional competence of subjects with low resilience among Bell's palsy subjects.

HYPOTHESIS

There will be a significant effect of psychological interventions in enhancing metacognitive thinking and emotional competence in managing the resilience among Bell's palsy subjects.

OPERATIONAL DEFINITION

PSYCHOLOGICAL INTERVENTION: Psychological Intervention is aimed at changing of maladaptive or undesirable behavioral patterns into desirable behavior. It

emphasized that the maladaptive behavior is based on faulty learning process and the appropriate treatment involves the changing of these behavioral patterns and learning of new ones.

SAMPLE

30 Subjects (15 male and 15 female) will be identified having low resilience from the study, within the age range of 20- 45 years, suffering from Bell's palsy since last 1 year with severity more than 50% and above.

DESIGN

Pre and post research design will be used to study the effectiveness of psychological interventions.

TECHNIQUES

Cognitive Restructuring: Cognitive restructuring, also known as cognitive reframing, is a technique drawn from cognitive therapy that can help people identify, challenge and alter stress-inducing thought patterns and beliefs. The end goal of cognitive restructuring is to enable people to replace stress-inducing thought habits with more accurate and less rigid (and therefore less stress-inducing) thinking habits.

Mindfulness-Based Stress Reduction (MBSR): Mindfulness-Based Stress Reduction technique is a well-defined and systematic individual- centered approach which includes intensive training in mindfulness meditation. The aim of technique is to teach people how to take better care of themselves and live healthier and more adaptive lives.

METHOD AND PROCEDURE

Psychological intervention will be given in managing the main contributing factors of resilience among Bell's palsy patients. Scores on Resilience Scale for Adult (RSA) obtained in the study will be served as baseline or pre measures for this part of the study. Three months intervention will be given to subjects with low resilience included in the

sample. Psychological intervention will include cognitive restructuring through counseling and mindfulness based stress reduction technique which will help in enhancing metacognitive thinking and emotional competence in managing resilience of subjects. Mindfulness based stress reduction technique helps subjects to become aware of the feeling that accompanies how to take better care of themselves and live healthier and more adaptive lives. Cognitive restructuring will help people in modifying their internal believes. Initially proper rapport will be stabilized with subject then mindfulness based stress reduction technique will be given along with counseling and then with the use of counseling find out the subjects believes causing their emotional problems by asking problematic situation and to catch undesirable self statements that emerge in the situation and practice desirable statement in place of the undesirable one. Initially approximately one hour session on alternate days will be conducted. After 45 days, sessions will be conducted twice a week. Subjects will be asked to think about self at least ones in a day at home. Thus the intervention will be continued for three months. The post measures of resilience scale for adult (RSA) will be taken. The measurement conditions maintained during pre- measure will be effective during post measure also.

ANALYSIS OF DATA

Significant difference between scores of pre and post measure will be tested by "Wilcoxon sign rank test".

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